DOCUMENT RESUME

ED 433 767 HE 032 317

AUTHOR McLure, Gail T.; Rao, A. M. Srikanta; Lester, William L.
TITLE Comparing Student Perceptions of General Education and Personal Growth Outcomes at HBCU and Non-HBCU Institutions. AIR 1999 Annual Forum Paper.
PUB DATE 1999-06-00
NOTE 41p.; Paper presented at the Annual Forum of the Association for Institutional Research (39th, Seattle, WA, May 30-June 3, 1999).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Black Colleges; College Outcomes Assessment; *College Students; Higher Education; Individual Development; *Student Attitudes; *Student Development; Values
IDENTIFIERS *AIR Forum

ABSTRACT

This study compared attitudes toward general education and personal growth of 3,410 students attending nine historically black colleges or universities (HBCUs) and 42,535 students attending 91 non-HBCUs. Data were retrieved from the most recent national user norm files for the College Outcomes Survey (COS). Analyses included percentages, factor analysis, item means, and factor means to describe results. Results indicated that students attending HBCUs tend to have more positive perceptions about their general education and their personal growth than do those attending non-HBCUs. Greater rating differences between the two groups appeared to be associated with the political awareness factor and the personal values factor, with HBCU students having higher ratings of their personal growth with respect to both factors. (Contains 18 references, 6 tables, and 7 graphs.) (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 433 767

Comparing Student Perceptions of General Education and Personal Growth Outcomes At HBCU and Non-HBCU Institutions

Gail T. McLure
Research Associate
ACT

A. M. Srikanta Rao
Director/Professor, Office of Institutional Analysis, Assessment, and Evaluation
Tuskegee University

William L. Lester
Provost
Tuskegee University

Paper prepared for
The 39th Annual Forum of the Association of Institutional Research

Seattle, WA
May 30 – June 2, 1999

Gail T. McLure, PhD
Research Associate
Educational and Social Research, ACT Inc.
2255 N. Dubuque Road
Iowa City, IA 52243-0168.
Phone: 319-339-3049
FAX: 319-339-3020.
Internet: mclure@act.org

William L. Lester, PhD
Provost
Tuskegee University
202 Kresge Center
Tuskegee, AL 36088.
Phone 334-727-8164.
FAX: 334-727-9903.
Internet:
wlester@acd.tusk.edu

A.M. Srikanta Rao, PhD,
Director
Office of Institutional Analysis, Assessment, and Evaluation
Tuskegee University
1506 Franklin Road
Tuskegee, AL 36088.
Phone: 334-727-8495
FAX: 334-727-8499
Internet: raoams@acd.tusk.edu

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

D. Vura

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

BEST COPY AVAILABLE

HE 032 317

AIR
for Management Research, Policy Analysis, and Planning

This paper was presented at the Thirty-Ninth Annual Forum of the Association for Institutional Research held in Seattle, Washington, May 30-June 3, 1999.
This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of AIR Forum Papers.

Dolores Vura
Editor
Air Forum Publications

Abstract

We analyzed HBCU and non-HBCU student perceptions of college outcomes—particularly those related to General Education and Personal Growth. The sample consisted of nearly 3,410 students attending 9 HBCUs and 42,535 students attending 91 non-HBCUs. All were 4-year institutions, all had administered the ACT *College Outcomes Survey* (COS), and all were included in the most recent national COS user norms. The analyses included percentages, factor analysis, item means, and factor means to describe results. Students attending HBCUs tend to have more positive perceptions about their General Education and their Personal Growth "since entering this college" than do those attending non-HBCUs. These findings demonstrate how data from one or more institutions can be compared to national user group norms to highlight areas of strength and identify areas for program improvement.

Comparing Student Perceptions of General Education and Personal Growth Outcomes

At HBCU and Non-HBCU Institutions

Introduction

Since the 1992 Supreme Court decision in *United States v. Fordice,* the courts have asked HBCUs to justify their existence (Wenglinsky, 1997, 1996; American Association of University Professors, 1995). The HBCU role in providing education for Black students is evident in the fact that 16% of those enrolled in colleges and universities in 1994 were attending HBCUs (Hoffman, Snyder, & Sonneberg, 1996). As HBCUs and non-HBCUs alike become more racially diverse, they have a greater need for information about student perceptions of the overall college experience.

The most direct means of finding out how students feel about their college experience is to ask them. Surveys are widely recognized as an effective way to gather such feedback (Astin, 1991; Seymour, 1992; Banta, 1985) and have been found to be reliable (Middelholtz & Noble, 1993; Scriven, 1993; Sawyer, Laing, & Houston, 1988; Valiga, 1990, 1987). An institution can begin such an effort by gathering student perceptions of the General Education program. General Education's scope is broad and encompasses personal growth as well as academic growth. The following statement from the inside cover of the *Journal of General Education* suggests not only the mission of that journal but the mission and breadth of General Education on many campuses.

> *How can today's college students be better prepared for tomorrow's world? Do they have the prerequisite abilities to analyze and interpret complex social events, to find and fulfill rewarding personal lives, and to contribute to the social commonweal? What constitutes general learning today? Is it basic skills development, critical thinking and problem solving, the understanding of our cultures and traditions, or the exploration of new worlds, peoples, and languages? (JGE, 1998, p.iii.)*

In previous research using data from ACT's national College Outcomes Survey (COS) archives database, researchers (McLure, Rao, Lester, & Green, 1998) studied HBCU and non-HBCU student perceptions of the level of helpfulness of General Education courses, finding that HBCU students tended to agree more strongly than did non-HBCU students that their General Education courses—those required courses outside the major—helped them in several ways (ACT, 1998). Ways listed on the survey included help to (1)

broaden their awareness of diversity among people, their values and cultures (2) become a more independent and self-directed learner; (3) develop as a whole person; (4) appreciate great works of literature, philosophy, and art; (5) increase their knowledge of the earth and its physical and biological resources; (6) build a framework to organize their learning within and across areas of study; and (7) think about their major in the context of a larger world view. This same study also found that HBCU students rated a summary item which needs Personal Growth (developing self understanding, self-discipline, and mature attitudes, values, and goals) significantly higher than did non-HBCU students. Other research (McLure, Green, Rao, Lester, & Boatwright, 1998) suggests that racial/ethnic differences also exist within HBCU institutions, in that Blacks tend to have significantly higher Likert scale rating means on the Personal Growth item than do non-Blacks on the same item. However, both of these studies used only one item to measure personal growth, and otherwise focused primarily on perceptions of 26 cognitive skill outcomes in a different section.

In the current study, we continued to study General Education outcomes, but broadened the scope of the measure of Personal Growth to include 36 items (Section II-D of the COS) especially developed for that purpose.

Purpose. The purpose of this study was to examine HBCU and non-HBCU students' ratings of 36 Personal Growth outcomes (in Section II-D of the COS) and to reexamine ratings of General Education (in Section II-B of the COS). Specifically, we addressed the following questions, most of which apply to both HBCU and non-HBCU students.

- Overall, how did HBCU students compare with non-HBCU students on their ratings of General Education and of Personal Growth "since entering the college"?
- What factors are inherent in the 36-item Personal Growth section of the COS?
- Were there significant differences in Personal Growth factor means of HBCU and non-HBCU students?
- For students who **agreed** (and for those who **disagreed**) with specific General Education items, were there significant differences in Personal Growth factor means of HBCU and non-HBCU students?

Methods

Data for the Study

Data for this study were retrieved from the most recent national user norms files for the ACT College Outcomes Survey (COS). The sample consisted of 45,945 students—3,410 respondents from nine HBCUs and 42,535 respondents from 91 non-HBCUs. All institutions were 4-year colleges and universities that had been included in the most recent ACT COS user group norms. The nine HBCUs are located in six states—Alabama, Georgia, Louisiana, Missouri, North Carolina, and Texas. The 91 non-HBCUs are located in 39 states and the District of Columbia. More information about the demographic characteristics of the two samples appears in the Results section (see Table 1).

Survey Administration Mode

According to information submitted with the surveys at the time they were sent to ACT for scanning, analysis, and reporting, institutions administered the survey to students using a variety of administration modes, some of which were not identified except by the term "Other." The effects of these various administration modes on the data are unknown.

Instrument

The COS was designed to collect student perceptions of growth and preparation in cognitive and affective areas and satisfaction with various aspects of the institution and to do so after the student has been exposed to the college environment for a reasonable period of time. The outcome statements on the instrument are broad enough in scope to be applicable to most postsecondary institutions yet specific enough to provide data that can be translated into institutional action. The instrument requests of students that they respond to several type of items, including the following:

- demographic items (e.g., major, sex, cumulative GPA, responsibilities, and time allocations in 11 areas including hours of employment)
- 26 cognitive skills and intellectual development outcomes of college. Each of these items is to be rated twice—first, on the level of perceived importance the respondent places on attaining each outcome (regardless of the progress made toward attaining it) and second, on the extent of progress made toward attaining the outcome at the college (regardless of its importance to the respondent)
- 7 agree/disagree statements about general education courses
- 9 agree/disagree statements "about this college" (e.g., "This college has helped me meet the goals I came here to achieve")

- 36 personal growth outcomes of college to be rated on extent of personal growth and extent of college contribution to that growth
- 39 satisfaction-with-college items
- 5 summary items about campus contribution to overall intellectual, personal, and social growth and preparation for further study and for a career

This study used data from three of these sections. We used a few items from the demographic section, I-Background Information, to help describe the sample. Otherwise, the analyses focus on the seven general education items in Section II-B and the 36 personal growth items in Section II-D.

General Education Section II-B of the COS. In the development of the COS, seven items were added for the purpose of assessing general education. To avoid any confusion that be caused by using the term "General Education" in the instrument, the items were introduced with the simple instruction, "Indicate your views of required courses OUTSIDE your major." An item was used to help the student associate each of the seven items with the concept of the General Education program—"Required courses *outside* my area of specialization helped me...." Each item suggests a continuation of this thought by beginning with the same three dots and a completion of the stem.

Personal Growth section II-D of the COS. Several aspects of personal growth and development were considered in the development of the 36 items in Section II-D. Some aspects are more closely allied with the missions of higher education institutions than are others. The degree to which institutions assume responsibility for students' personal growth will vary, not only by institutional mission but also by circumstance, resources, and personnel. Personal growth during college years also occurs among students, whether the institution intends it or not. Indeed, it even occurs whether the student intends it or not.

The Personal Growth Section II-D is introduced with the following statement to the student: "Your personal growth since entering this college can be attributed to many factors, some of which may NOT be related to your experiences at this college." The student is further introduced to this section with these instructions: "PERSONAL GROWTH: Indicate to the LEFT of each item the extent of your **growth** since entering this college (regardless of the extent of the contribution made by your experiences at this college)."

The same set of 36 items call for a dual response from the student—one asking about personal growth and the other asking about the college contribution to personal growth. Two similar but distinct scales are used—one a Personal Growth Scale and the other a College Contribution Scale. Although the analysis of responses to the College Contribution Scale is beyond the scope of this paper, we should note that the proximity of instructions calling for the students' second response to the same set of 36 items is worth mentioning. The second part of the dual response is introduced with this statement: "COLLEGE CONTRIBUTION: Indicate to the RIGHT of each item the extent of the **college's contribution** (i.e., your college experiences both in and out of class) to your growth (regardless of the extent of your personal growth in a given area)." This second set of instructions appears directly underneath the first set about Personal Growth. The student is thus made aware that Personal Growth, as assessed on the first scale is intended to include all personal growth, not just that which occurs in relation to experiences at the college. Interpretations of results should take this into account.

Procedures and Definitions

By the way of describing the sample, we used frequencies and percentages to examine demographic data (e.g., racial/ethnic background, gender, age, cumulative college GPA). We used means to interpret scale ratings, factor analysis to reduce 36 Personal Growth items to factors, and t-tests to study between-group differences on both the individual items and the factors. In this study, we looked primarily for the effect of institution type—HBCU versus non-HBCU—on student perceptions of General Education outcomes and growth ratings.

Respondents to the COS indicate the extent to which they agree or disagree with each of seven statements about their General Education outcomes. To do this, they use a 5-point two dimensional Likert scale, where 5=strongly agree, 4=agree, 3=neutral, neither agree nor disagree, 2=disagree, and 1=strongly disagree. They may also indicate that the item is not applicable, in which case the response is not included in the analysis.

Respondents rate the 36 Personal Growth Scale items by referring to a 5-point one-dimensional scale, where 5=very much, 4=much, 3=moderate (average), 2=little, and 1=none. A sixth option, "Not a goal of mine," is listed, but is not included in the analyses. (Likewise, the College Contribution Scale ratings for the items are based on a similar 5-point one-dimensional scale, where 5=very great, 4=great, 3=moderate (average), 2=little, and 1=none. A sixth option, "Not applicable," is presented.) In discussions of these 5-point scales, reference to "moderate (average)" will be made by using the term "moderate."

For the 36 items in Section II-A, we used exploratory factor analysis with the entire 4-year college COS user norms to investigate the structure underlying the items in the Personal Growth Scale. A four-factor solution was satisfactory. We grouped the items accordingly by and named the factors—(2) Whole Person Skills (Items 25, 28, 27, 30, 31, 34, 36, 32, 26, 20, 29, 24, 19, 22, 23, and 21); (2) Social Interaction Skills (Items 1, 4, 2, 3, 6, 8, and 5); (3) Political Awareness (12, 11, 10, 13, 14, and 15); and (4) Personal Values (33, 18, 23, 16, 17, 19, and 9). Tables 3 and 4 provide additional information, including factor loadings for the items in each factor.

Characteristics of Respondents

Although an in-depth analysis of demographic characteristics is beyond the scope of this study, we have summarized a few such items in Table 1 to demonstrate the extent of comparability of the two samples. We used the racial/ethnic grouping of Black and Non-Black. Other demographic items summarized in Table 1 include gender, citizenship, major, cumulative college grade point average (GPA), age category, plans for the next academic year, highest lifetime goal when first enrolled at the institution, and the year in school-or classification. Students selected their majors from ACT's *List of College Majors and Occupational Choices*. For listing in Table 1, we regrouped the hundreds of majors into nine broad areas of study derived by combining areas in the original list (see Appendix).

Among the 3,410 HBCU respondents, about 86% were Black; among the 42,535 non-HBCU respondents, fewer than 5% were Black. More than two thirds of both HBCU and non-HBCU respondents were under 23 years of age. Females accounted for about 68% of HBCU respondents and 58% of non-HBCU respondents. More than 95% of each group were U.S. citizens, but three in ten (29%) of the HBCU students were from out of state compared with only 14% of the non-HBCU group.

The HBCU student sample tended to be younger than the non-HBCU sample, and nearly one third of the HBCU sample were second year students—sophomores—at the time of testing. By comparison, only 8% of non-HBCU students were sophomores. The major areas of study were similar for these two groups. Over a quarter of each sample indicated majors in business-related areas. Fewer HBCU students—21%--planned to be graduating the next year, compared with nearly 42% of non-HBCU students.

More non-HBCU than HBCU students reported grade point averages of A and B (3.0 to 4.0), (59% compared with 45.5%, respectively). Well over one third (36.7%) of HBCU students compared with 17.3% of non-HBCU students reported their highest lifetime goal when they first enrolled at the college to be a doctorate or professional level degree.

Results

General Education Outcomes

HBCU students rate all General Education items higher than do non-HBCUs. As shown in Table 2, students attending HBCUs rated all seven General Education items significantly higher (at the $p < .0001$ level) than did non-HBCU students.

Greatest help to both groups. General Education courses—those required courses *outside* the major area of specialization—helped both HBCU and non-HBCU respondents most in three areas.

...broaden my awareness of diversity among people, their values and cultures
...become a more independent and self-directed learner
...develop as a "whole person"

Greatest difference. The greatest differences in ratings between HBCU and non-HBCU students (as measured on a 5-point scale) occurred on four items (score-scale differences appear at the right.).

...become a more independent and self-directed learner.	0.28
...broaden my awareness of diversity among people, their values and cultures.	0.27
...think about my major in the context of a larger world view.	0.27
...build a framework to organize my learning *within* and *across* areas of study.	0.26

Lowest ratings of the same two items. Both HBCU and non-HBCU respondents gave their lowest General Education ratings to the same two items.

...increase my knowledge of the earth and its physical and biological resources
...appreciate great works of literature, philosophy,and art

Items rated above 4.00. None of the seven General Education items were rated above 4.00 ("Agree") by non-HBCU students, but two were rated above 4.00 by HBCU students. The two items rated above 4.00 by HBCU students were the following.

...broaden my awareness of diversity among people, their values and cultures
...become a more independent and self-directed learner

Items rated closer to Neutral than to Agree. Only non-HBCU students rated General Education items closer to 3.00 ("Neutral") than to 4.00 ("Agree"). The two items were the following.

...appreciate great works of literature, philosophy, and art
...increase my knowledge of the earth and its physical and biological resources

Personal Growth Outcomes

HBCU students rate all Personal Growth items higher than do non-HBCUs. As shown in Table 4, students attending HBCUs rated all 36 Personal Growth items significantly higher (at the $p < .0001$ level) than did non-HBCU students.

Greatest personal growth for both groups. Both HBCU and non-HBCU groups gave their highest rating to the same item, Item 17, *Taking responsibility for my own behavior* (4.28 for HBCUs and 4.06 for non-HBCUs). HBCU students gave their next highest Personal Growth ratings to Item 28, *Setting long-term or "life" goals* (4.25); Item 20, *Developing a sense of purpose, value, and meaning for my life* (4.20); Item 27, *Increasing my intellectual curiosity* (4.17); Item 25, *Becoming academically competent* (4.16); and Item 31, *Developing self-confidence* (4.16). Non-HBCU students gave their next highest ratings to Item 25, *Becoming academically competent* (4.02); Item 27, *Increasing my intellectual curiosity* (4.01); Item 36, *Acquiring a well-rounded General Education* (3.99); and Item 28, *Setting long-term or "life" goals* (3.96).

Lowest ratings of Personal Growth to the same item. Both HBCU and non-HBCU respondents gave their lowest Personal Growth rating to the same item—Item 11, *Preparing myself to participate effectively in the electoral process* (3.63 for HBCUs and 3.17 for non-HBCUs). HBCU students gave their next lowest Personal Growth ratings to Item 13, *Gaining insight into human nature through the study of literature, history, and the arts* (3.70); Item 7, *Actively participate in volunteer work to support worthwhile causes* (3.70); Item 10, *Becoming more aware of global and international issues/events* (3.72); and Item 12,

Becoming more aware of local and national political and social issues (3.75). Even though these ratings were lowest, they were still closer to a 4.00 rating of "Much" than to a 3.00 rating of "Moderate". Non-HBCU students gave their next lowest Personal Growth ratings to Item 7, *Actively participating in volunteer work to support worthwhile causes*; Item 12, *Becoming more aware of local and national political and social issues* (3.35); Item 33, *Developing my religious values* (3.38); Item 13, *Gaining insight into human nature through the study of literature history, and the arts*; and Item 16, *Understanding religious values that differ from my own* (3.45).

Factor Analysis of Personal Growth Items

Four factors that resulted from the factor analysis are presented in Tables 3 and 4. They are also shown in Tables 5. Table 5 compares the standard score scale means of HBCUs and non-HBCUs. The larger size of the non-HBCU group accounts for the near-zero mean of that group. Because the HBCU group tended to assign higher ratings to all of the Personal Growth Scale items than did the non-HBCU group, that tendency is reflected in higher standard scores on all four factors. HBCU students gave relatively higher ratings to items comprising the Political Awareness factor (0.34 compared with –0.03 for non-HBCU students) and the Personal Values factor (0.37 compared with –0.03 for non-HBCU students). The "relative" nature of these standard score scale ratings becomes more apparent when they are compared with the 5-point Likert scale ratings shown in Table 4. For example, none of the six items in the Political Awareness factor was at or above 4.00. But the differences between the two groups' ratings are shown in Table 4 the Difference column. Four of the items in the Political Awareness factor were among the lowest ratings assigned by the non-HBCU group. A similar circumstance is shown for the Personal Values factor. Even though both groups have at least one mean in that set of items above 4.00, some of the sharpest differences also are shown in the Difference column. For example, Item 33, *Developing my religious values*, has an HBCU mean of 3.97, whereas the same item has a non-HBCU mean of only 3.38—a difference of 0.59 score scale points on the 5-point scale.

General Education Related to Four Personal Growth Factors

An institution may want to know how students who agree with the value of the General Education program feel about their personal growth. Table 6 shows each of the seven General Education items as they relate to the four Growth factors. For this analysis, students in each group were subdivided into two groups, those who agreed or strongly agreed with a given General Education item and those who either disagreed or were

neutral. Each item was analyzed separately. The "Agreeing" columns show standard factor scores for those who agree and does so with respect to each of the four factors. HBCUs and non-HBCU groups are presented separately with respect to the Agree and Disagree ratings of General Education. "Agreeing" refers to those respondents who either agreed or strongly agreed with the various General Education items. For example, HBCU students who agreed that General Education helped them "...think about my major in the context of a larger world view" have a standard factor score of 0.13 on Personal Growth Factor 1, "Whole Person Skills"; a score of 0.17 on Factor 2, "Social Interaction Skills"; a score of 0.48 on Factor 3, "Political Awareness"; and a score of 0.43 on Factor 4, "Personal Values." Figure 1 illustrates these scores and contrasts them with the lower factor scores on each item of non-HBCU students who also agreed or strongly agreed on the same General Education item. Figures 2 through 7 illustrate each of the remaining General Education items for students who marked "Agree" or "Strongly Agree" on the seven General Education items.

The opposite half of Table 6 shows the same thing for students who were either neutral or who disagreed with the seven General Education items. For example, HBCU students who disagreed that General Education helped them to "...think about my major in the context of a larger world view" had a Personal Growth Factor 1 "Whole Person Skills" rating that was below zero—that is, that was below the mean of the entire group on which the factors were based. .. Non-HBCU students who disagreed with the same General Education item had an even lower standard score on Factor 1, "Whole Person Skills."

The factor scores worth noting are those that rise above or below the mean—zero, in this case—by more than 0.2 or 03. Beyond these levels we can assume the score differences are caused by something other than "response set." ("Response set" may be thought of as a tendency to respond either high or low on a given scale to all items.)

On the "Agreeing with General Education" side of Table 6, HBCU students have scores above 0.4—well above the criterion of 0.2 that we might impose on the data to eliminate "response sets", and about their own scores on Factors 1 and 2. In other words, response set does not appear to explain the relatively high ratings made by HBCUs to Factors 3 and 4.

Even among HBCU students who disagreed with the General Education items, their Factor 3 and 4 scores are above the standard score mean of zero, while the non-HBCU group ranged as low as –0.20 in several cells of Table 6.

In summary, HBCU students differ from non-HBCUs more on the Political Awareness factor and the Personal Values factor than they do on the other two Personal Growth factors.

Conclusion

We have examined differences between HBCU and non-HBCU students in their perceptions of General Education and Personal Growth. HBCU students tend to assign significantly higher ratings to both areas. Greater rating differences between the two groups appear to be associated with the Political Awareness factor and the Personal Values factor, with HBCUs having higher ratings of their personal growth with respect to both factors.

References

ACT (1988). *ESS Postsecondary User's Guide*. Iowa City, IA: American College Testing. *College Outcomes Survey*. Iowa City, IA: ACT, Inc.

American Association of University Professors. (1995). The historically black colleges and universities: A future in the balance. *Academe, 81*(1), 49-58.

Astin, A.W. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. New York: ACE/Macmillan.

Banta, T.W. (1985). Use of outcomes information at the University of Tennessee, Knoxville. In Ewell, P.T. (Ed.), *Assessing educational outcomes. New Directions for Institutional Research* (No. 47). San Francisco: Jossey-Bass.

Hoffman, C.M., Snyder, T.D., & Sonnenberg, B. (1996). *Historically black colleges and universities, 1976-1994*. Washington, DC: National Center for Education Statistics.

Journal of General Education. (1998). Untitled forward, 47(3), iii.

McLure, G.T., Rao, A.M.S., Lester, W.L., & Green, M.D. (1998). *Assessing general education: Ten HBCUs compared to national College Outcomes Survey user norms*. Paper prepared for the 1998 AAHE Assessment Conference in Cincinnati, OH.

McLure, G.T., Green, M.D., Rao, A.M.S., Lester, W.L., & Boatwright, M.A. (1998). *Perceptions of growth and preparation among blacks and non-blacks on historically black colleges and university (HBCU) campuses*. Paper prepared for the 38th Annual Forum of the Association of Institutional Research, Minneapolis, MN.

McLure, G.T., Rao, A.M.S., Green, M.D., & Lester, W.L. (1997). College outcomes in cognitive and affective areas: A comparison of historically black colleges and universities (HBCUs) to a national COS user sample. *TBCU Research Journal,* 1(2), 36-47. Article was based on a paper prepared for the 1997 AAHE Conference on Assessment and Quality in Miami Beach, FL.

Pascarella, E.T., & Terenzini, P.T. (1991). How colleges affect students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass Publishers, Inc.

Mittelholtz, D.J., & Noble, J.P. (1993). *The validity of Evaluation/Survey Service survey instruments for reflecting institutional change*. (ACT Research Report Series No. 93-2). Iowa City, IA: ACT.

Sawyer, R., Laing, J., & Houston, M. (1988). Accuracy of self-reported high school courses and grades of college-bound students. (ACT Research Report No. 88-1). Iowa City, IA: American College Testing.

Scriven, Michael. (1993). *Hard-won lessons in program evaluation*. New Directions for Program Evaluation (No. 58). San Francisco: Jossey-Bass.

Seymour, D. (1992). *On Q: Causing quality in higher education*. New York: American Council on Education/Macmillan.

Valiga, M.J. (1990). *Assessing the reliability of questionnaires and survey instruments using generalizability theory*. PhD dissertation, The University of Iowa, 1990. Dissertation Abstracts International, 51(09-A), 3050.

Valiga, M.J. (1987). *The accuracy of self-reported high school course and grade information*. (ACT Research Report No. 87-1. Iowa City, IA; American College Testing.

Wenglinsky, H.H. (1996). The educational justification of historically black colleges and universities: A policy response to the U.S. Supreme Court. *Educational Evaluation and Policy Analysis*, 18(1), 91-103).

Wenglinsky, H.H. (1997). *Students at historically black colleges and universities: Their aspirations and accomplishments*. Policy Information Report. Princeton, NJ: ETS.

Table 1
Demographic Characteristics of HBCU and Non-HBCU Students in the *College Outcomes Survey* (COS) National 4-Year College User Norms Sample

	Total (N=45,945)		HBCU Students (N=3,410)		Non-HBCU Students (N=42,535)	
	N	%	N	%	N	%
Ethnicity	45,945		3,410		42,535	
Black		10.5		85.8		4.4
Non-Blacks		89.5		14.2		95.6
Gender	45,515		3,377		42,138	
Male		41.1		31.7		41.9
Female		58.9		68.3		58.1
Citizenship	45,479		3,370		42,109	
US Citizen/In State		80.1		68.1		81.0
US Citizen/Out of State		15.4		29.4		14.3
Resident Alien/Immigrants		2.1		1.2		2.2
Non-Resident Aliens		2.4		1.2		2.5
Age	45,945		3,410		42,535	
23 years and under		68.1		77.6		67.3
24 years and over		31.9		22.4		32.7
Classification	45,737		3,410		3,383	
2nd Year/Sophomore		9.7		31.4		8.0
3rd Year/Junior		0.8		—		0.9
4th Year/Senior		37.3		32.9		37.7
Other Combination in 4 Years		25.5		26.3		27.6
Other Beyond 4 Years		24.6		9.4		25.8
Major	45,737		3,220		39,939	
Undecided		2.3		1.3		2.4
Business Related		25.8		26.4		25.7
Agri/Trade/Tech		3.7		3.9		3.6
Education		12.5		10.2		12.7
Engineer/Related		6.9		7.0		6.9
Health/Related		10.7		13.7		10.5
Social Sciences/Community Services		18.7		16.5		18.8
Math/Science/Computer Science		11.6		17.6		11.1
Other Liberal Arts		7.9		3.4		8.2
Plans for Next Year	45,187		3,336		41,851	
Graduating: No College		39.2		21.2		40.7
Stop-out		0.6		0.4		0.6
Re-Enroll Here		40.1		52.4		39.2
Attend Other College		10.8		16.4		10.4
Undecided		9.2		9.7		9.2
GPA	42,443		2,992		39,451	
A, B (3.0-4.0)		58.2		45.5		59.1
B-, C (2.0-2.99)		39.9		52.3		39.0
C-, D (1.0-1.99)		1.8		2.3		1.8
Does not apply		0.0				0.1
Highest Goal: When First Enrolled Here	32,559		1,898		30,661	
Associate Degree/Less		5.9		3.3		6.1
Bachelor's Degree		48.2		35.0		49.0
Master's Degree		27.4		25.0		27.6
Doctorate/Professional Degree		18.5		36.7		17.3

Note. Data are based on the 4-year colleges included in the national COS user norms. The sample consisted of 100 colleges, nine Historically Black Colleges and Universities (HBCUs) and 91 Non-HBCUs.

Table 2
Perceptions of General Education: Views of Required Courses Outside the Major Area of Specialization
HBCU Students Compared to Non-HBCU Students

	HBCU	Non-HBCU		
Statements About Required Courses *OUTSIDE* the Major	**Means Based on 5-point Scale**		**Difference**	**t-Statistics**
Required Courses *outside* my area of specialization helped me...				
...think about my major in the context of a larger world view	3.84	3.57	0.27	14.38****
...develop as a "whole person."	3.94	3.75	0.19	10.35****
...appreciate great works of literature, philosophy, and art.	3.66	3.45	0.21	10.90****
...broaden my awareness of diversity among people, their values and cultures.	4.01	3.74	0.27	15.51****
...increase my knowledge of the earth and its physical and biological resources.	3.64	3.45	0.19	10.04****
...build a framework to organize my learning *within* and *across* areas of study.	3.87	3.61	0.26	15.00****
...become a more independent and self-directed learner.	4.01	3.73	0.28	15.20****

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Note. Agreement Scale means were computed from a two-dimensional scale, where 5=Strongly Agree, 4=Agree, 3=Neutral, Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree. These data were based on samples of 3,410 respondents at nine 4-year Historically Black Colleges and Universities (HBCUs) and 42,535 respondents at 91 non-HBCUs where the ACT *College Outcomes Survey* was administered.

Table 3
Four Factors From the Personal Growth Section IID of the ACT College Outcome Survey (COS)
Using 4-Year College National Norms Data

Loadings	Item
	Factor 1 – Whole Person Skills
.71	25. Becoming academically competent
.70	28. Setting long-term or "life" goals
.68	27. Increasing my intellectual curiosity
.67	30. Understanding myself, my talents, and my interests
.67	31. Developing self-confidence
.64	34. Improving my ability to stay with projects until they are finished
.64	36. Acquiring a well-rounded General Education
.63	32. Becoming more willing to change and learn new things
.62	26. Developing productive work relationships with both mean and women
.61	20. Developing a sense of purpose, value, and meaning for my life
.60	29. Constructively expressing both emotions and ideas
.59	24. Acquiring appropriate social skills for use in various situations
.53	19. Clarifying my personal values
.52	22. Dealing fairly with a wide range of people
.51	23. Developing moral principles to guide my actions and decisions
.49	21. Learning how to manage finances (personal, family, or business)
	Factor 2 –Social Interaction Skills
.68	1. Becoming an effective team or group member
.68	4. Improving my ability to relate to others
.65	2. Becoming more willing to consider opposing points of view
.63	3. Interacting well with people from cultures other than my own
.62	6. Developing leadership skills
.59	8. Learning to be adaptable, tolerant, and willing to negotiate
.55	5. Preparing to cope with changes as they occur (e.g., in career, relationships, lifestyle)
	Factor 3 – Political Awareness
.81	12. Becoming more aware of local and national political and social issues
.76	11. Preparing myself to participate effectively in the electoral process
.71	10. Becoming more aware of global and international issues/events
.63	13. Gaining insight into human nature through the study of literature, history, and the arts
.62	14. Recognizing my rights, responsibilities, and privileges as a citizen
.52	15. Becoming sensitive to moral injustice and ways of avoiding or correcting them
	Factor 4 – Personal Values
.66	33. Developing my religious values
.58	18. Learning how to become a more responsible family member
.56	23. Developing moral principles to guide my actions and decisions
.54	16. Understanding religious values that differ from my own
.51	17. Taking responsibility for my own behavior
.51	19. Clarifying my personal values
.50	9. Seeking and conveying the spirit of truth

Note. Data are based on 4-year colleges included in the national COS user norms. Four factors were identified, the names of which have been assigned to suggest the content and which are listed about their group of corresponding items. Factor loadings are listed at left. Two items from the Personal Growth section, IID, were not included, Items 7 and 35, because they did not load heavily on any of the factors. Two other items, Items19 and 23 were loaded on two factors.

BEST COPY AVAILABLE

Table 4
Perceptions of Personal Growth Outcomes of HBCU and Non-HBCU Students
Grouped by Four Factors Derived from National COS User Norms for 4-Year Colleges

Item #	HBCU N=3,410	Non-HBCU N=42,535	Difference	t-Statistics
Factor 1 – Whole Person Skills				
25. Becoming academically competent	4.16	4.02	0.14	8.39****
28. Setting long-term or "life" goals	4.25	3.96	0.29	17.52****
27. Increasing my intellectual curiosity	4.17	4.01	0.16	10.00****
30. Understanding myself, my talents, and my interests	4.11	3.88	0.23	14.18****
31. Developing self-confidence	4.16	3.93	0.23	13.67****
34. Improving my ability to stay with projects until they are finished	4.10	3.86	0.24	14.07****
36. Acquiring a well-rounded General Education	4.19	3.99	0.20	12.63****
32. Becoming more willing to change and learn new things	4.14	3.92	0.22	13.85****
26. Developing productive work relationships with both mean and women	4.09	3.84	0.25	15.15****
20. Developing a sense of purpose, value, and meaning for my life	4.20	3.94	0.26	16.02****
29. Constructively expressing both emotions and ideas	4.02	3.75	0.27	16.37****
24. Acquiring appropriate social skills for use in various situations	4.03	3.82	0.21	12.97****
19. Clarifying my personal values	4.14	3.92	0.22	13.64****
22. Dealing fairly with a wide range of people	4.09	3.87	0.22	13.54****
23. Developing moral principles to guide my actions and decisions	4.08	3.81	0.27	16.16****
21. Learning how to manage finances (personal, family, or business)	4.02	3.69	0.33	18.38****
Factor 2 – Social Interaction Skills				
1. Becoming an effective team or group member	4.00	3.84	0.16	9.42****
4. Improving my ability to relate to others	4.12	3.90	0.22	13.97****
2. Becoming more willing to consider opposing points of view	3.99	3.83	0.16	10.09****
3. Interacting well with people from cultures other than my own	3.99	3.77	0.22	12.63****
6. Developing leadership skills	4.03	3.82	0.21	11.70****
8. Learning to be adaptable, tolerant, and willing to negotiate	4.00	3.74	0.26	15.92****
5. Preparing to cope with changes as they occur (e.g., in career, relationships, lifestyle)	4.11	3.87	0.24	14.49****
Factor 3 – Political Awareness				
12. Becoming more aware of local and national political and social issues	3.75	3.35	0.40	20.47****
11. Preparing myself to participate effectively in the electoral process	3.63	3.17	0.46	21.51****
10. Becoming more aware of global and international issues/events	3.72	3.51	0.21	11.26****
13. Gaining insight into human nature through the study of literature, history, and the arts	3.70	3.43	0.27	13.71****
14. Recognizing my rights, responsibilities, and privileges as a citizen	3.98	3.49	0.49	27.25****
15. Becoming sensitive to moral injustice and ways of avoiding or correcting them	3.94	3.60	0.34	19.05****

(continued)

Table 4 (continued)

Item #	HBCU N=3,410	Non-HBCU N=42,535	Difference	t-Statistics
Factor 4 – Personal Values				
33. Developing my religious values	3.97	3.38	0.59	19.02****
18. Learning how to become a more responsible family member	4.15	3.80	0.35	29.98****
23. Developing moral principles to guide my actions and decisions	4.08	3.81	0.27	19.03****
16. Understanding religious values that differ from my own	3.89	3.45	0.44	13.64****
17. Taking responsibility for my own behavior	4.28	4.06	0.22	16.16****
19. Clarifying my personal values	4.14	3.92	0.22	13.56****
9. Seeking and conveying the spirit of truth	4.03	3.73	0.30	23.83****
Items Not Listed with the Four Factors				
7. Actively participating in volunteer work to support worthwhile causes	3.70	3.18	0.52	24.32****
35. Becoming a more effective member in a multi-cultural society	3.94	3.56	0.38	21.85****

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

Note. This Personal Growth Scale mean was computed from a one-dimensional scale, where 5=Very Much, 4=Much, 3=Moderate (Average), 2=Little, 1=None. Not included in the analysis was a 6th option, "Not a goal of mine." The items are grouped into 4 factors generated from data using factor analysis of 4-year college student records in the COS national user norms database. Data for means and t-statistics were based on samples of 3,410 HBCU students and 42,535 non-HBCU students in the same 4-year national COS user norms.

Table 5
Personal Growth: Perceptions of Personal Growth Since Entering College (COS, Section IID)
Comparison of HBCU and Non-HBCU Students in the 4-Year National COS User Norms

Personal Growth Factors	HBCU Students N=2,999	Non-HBCU Students N=37,554	t-Statistics
Your personal growth since entering this college regardless of the extent of the contribution made by your experiences at this college	Standard Mean	Standard Mean	
Factor 1: Whole Person Skills (#25,28,27,30,31,34,36,32,26,20,29,24,19,22,23,21)	0.07	-0.01	3.99****
Factor 2: Social Interaction Skills (#1,4,2,3,6,8,5)	0.08	-0.01	4.31****
Factor 3: Political Awareness (#12,11,10,13,14,15)	0.34	-0.03	20.21****
Factor 4: Personal Values (#33,18,23,16,17,19,9)	0.37	-0.03	25.86****

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$

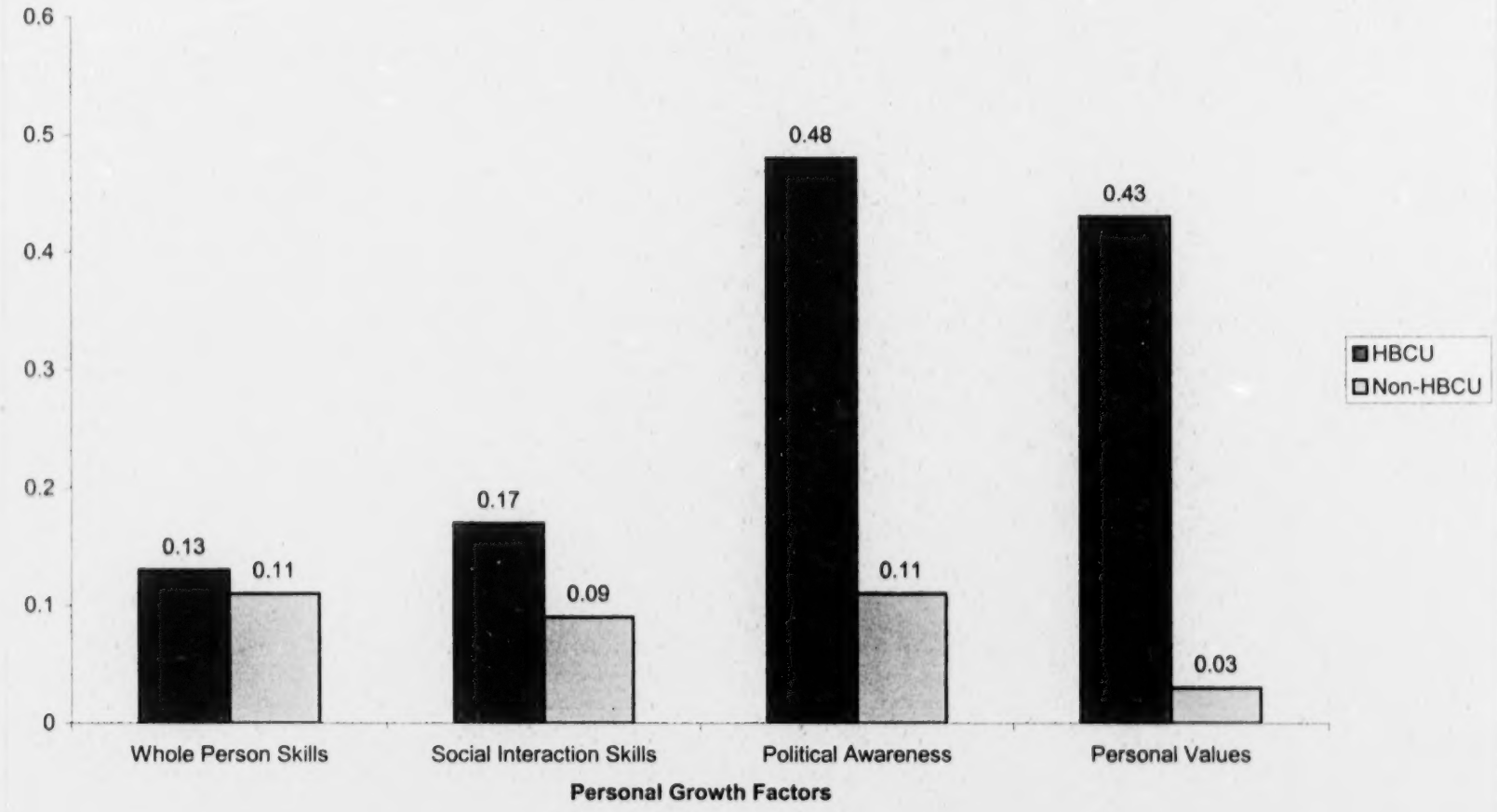
Note. Data were derived from a one-dimensional scale, where 5=Very Much, 4=Much, 3=Moderate, 2=Little, 1=None. Not included in the analysis was 6th option, "Not a goal of mine." The data were based on COS national user norms for 4-year colleges and universities. The factor means are based on a standard score scale with a mean of 0.0 and a standard deviation of 1. Because of the larger size of the Non-HBCU group, their standard means are near zero. The standard HBCU means are significantly higher.

Table 6
Personal Growth Among HBCU and Non-HBCU Students
In Relation to Their Perceptions of General Education

Required courses outside my area of specialization helped me...	AGREEING with General Education Statements								DISAGREEING or Neutral about General Education Statements							
	HBCU				Non-HBCU				HBCU				Non-HBCU			
	Standard Score Scale Means for personal Growth Factors								Standard Score Scale Means for personal Growth Factors							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. ...think about my major in the context of a larger world view	0.13	0.17	0.48	0.43	0.11	0.09	0.11	0.03	-0.04	-0.14	0.02	0.27	-0.15	-0.14	-0.22	-0.10
2. ...develop as a "whole person."	0.15	0.14	0.42	0.42	0.10	0.08	0.06	0.00	-0.14	-0.13	0.08	0.24	-0.23	-0.17	-0.22	-0.10
3. ...appreciate great works of literature, philosophy, and art.	0.16	0.17	0.52	0.42	0.09	0.06	0.18	0.13	-0.05	-0.07	0.05	0.30	-0.10	-0.07	-0.25	-0.09
4. ...broaden my awareness of diversity among people, their values and cultures.	0.15	0.16	0.41	0.44	0.09	0.10	0.17	0.14	-0.16	-0.21	0.08	0.16	-0.20	-0.21	-0.22	-0.16
5. ...increase my knowledge of the earth and its physical and biological resources.	0.15	0.17	0.53	0.41	0.09	0.07	0.16	0.02	-0.03	-0.07	0.06	0.32	-0.10	-0.07	-0.22	-0.08
6. ...build a framework to organize my learning *within* and *across* areas of study.	0.17	0.18	0.43	0.42	0.14	0.10	0.10	0.03	-0.15	-0.19	0.09	0.26	-0.21	-0.15	-0.23	-0.11
7. ...become a more independent and self-directed learner.	0.16	0.17	0.41	0.43	0.15	0.19	0.07	0.03	-0.17	-0.21	0.09	0.19	-0.29	-0.19	-0.21	-0.14

Note. Agreement Scale means were computed from a two-dimensional scale, where 5=Strongly Agree, 4=Agree, 3=Neutral, Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree. Not included in the analysis was a 6th option, "Not Applicable To Me." These data were based on samples of 3,410 respondents at nine 4-year Historically Black Colleges and Universities (HBCUs) and 42,535 respondents at 91 non-HBCUs where the ACT *College Outcomes Survey* was administered. The factor means are based on a standard score scale with a mean of 0.0 and a standard deviation of 1.

Figure 1
Agreed--General Education Helped Me...
"think about my major in the context of a larger world view"



BEST COPY AVAILABLE

Figure 2
Agreed--General Education Helped Me...
"develop as a whole person"

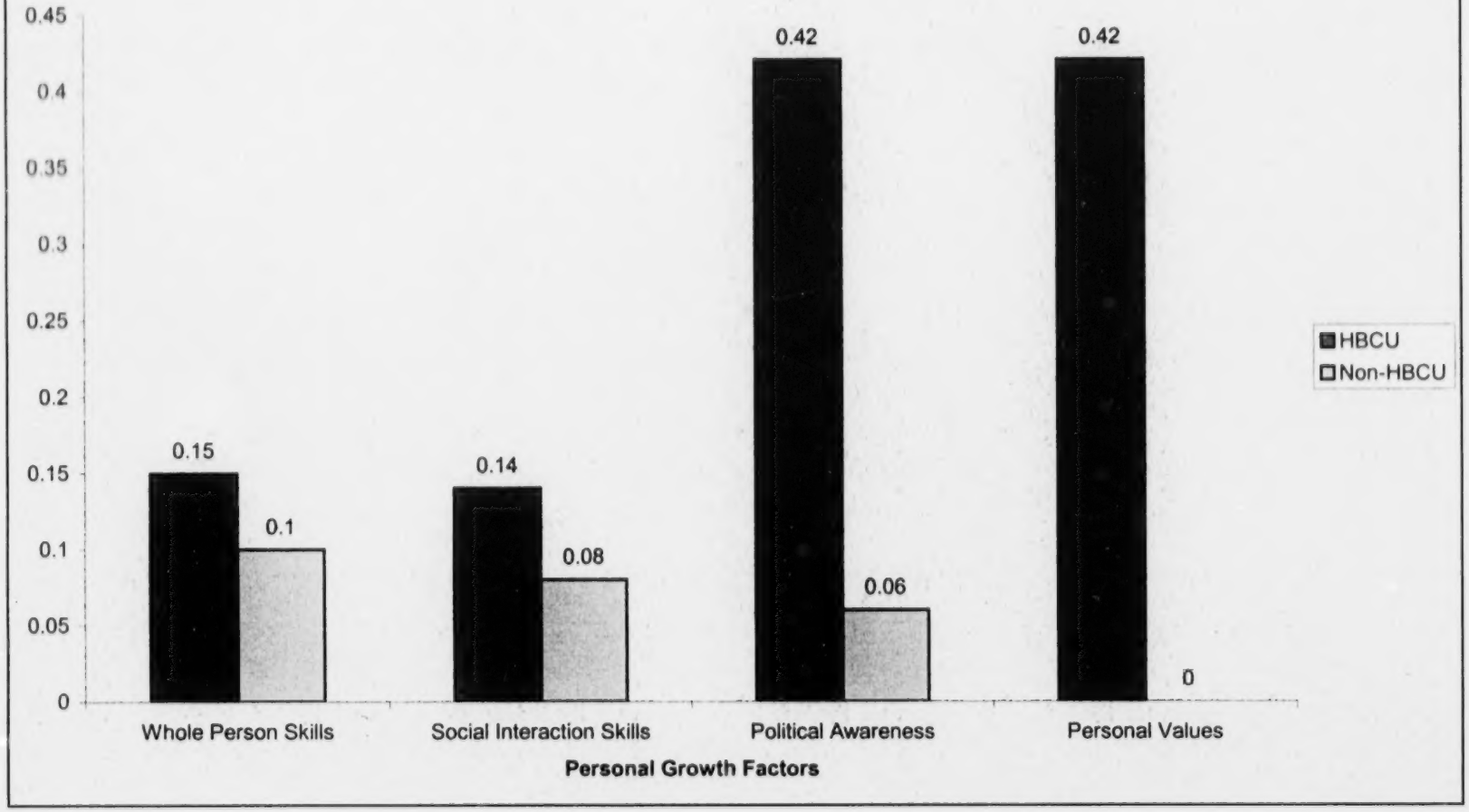
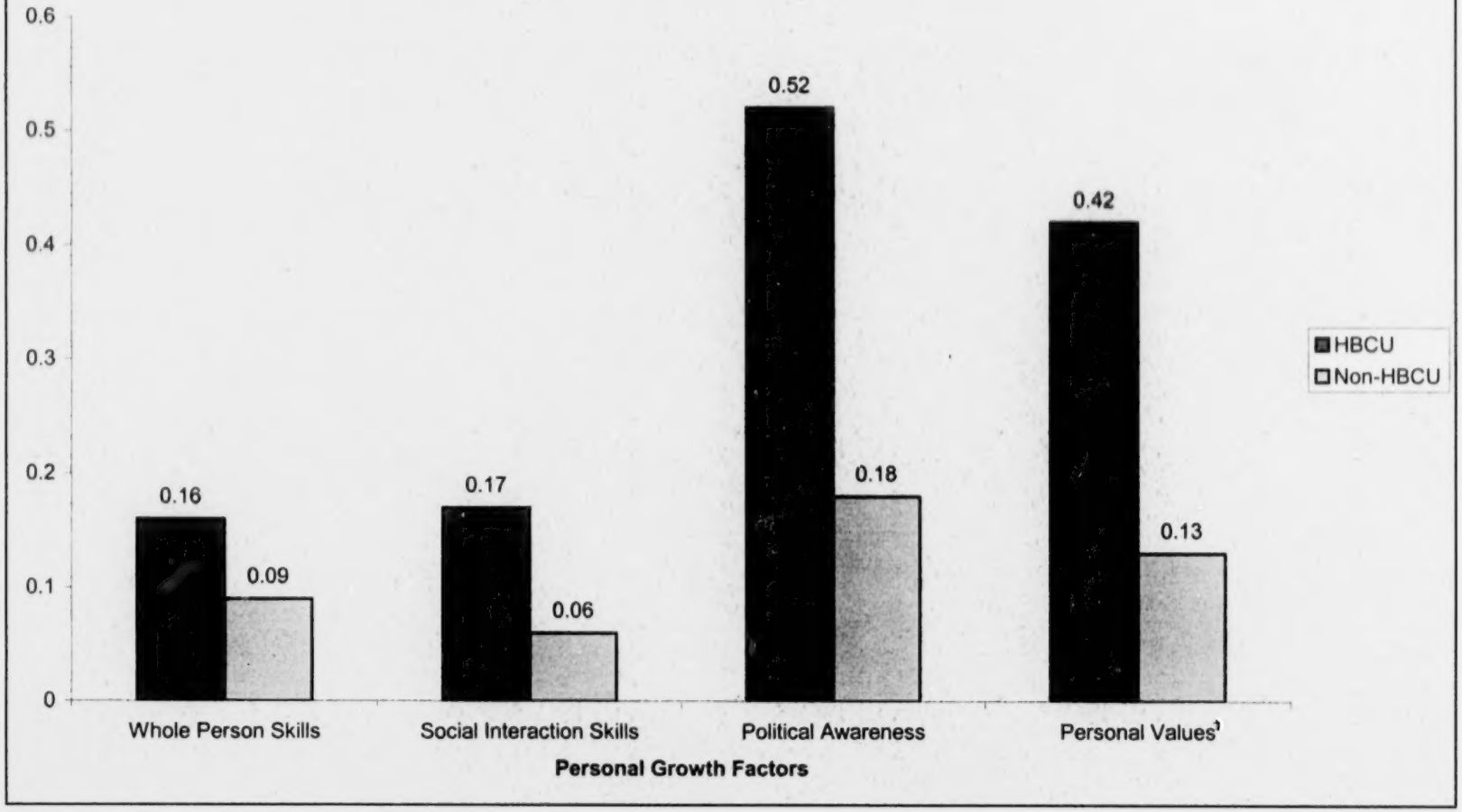
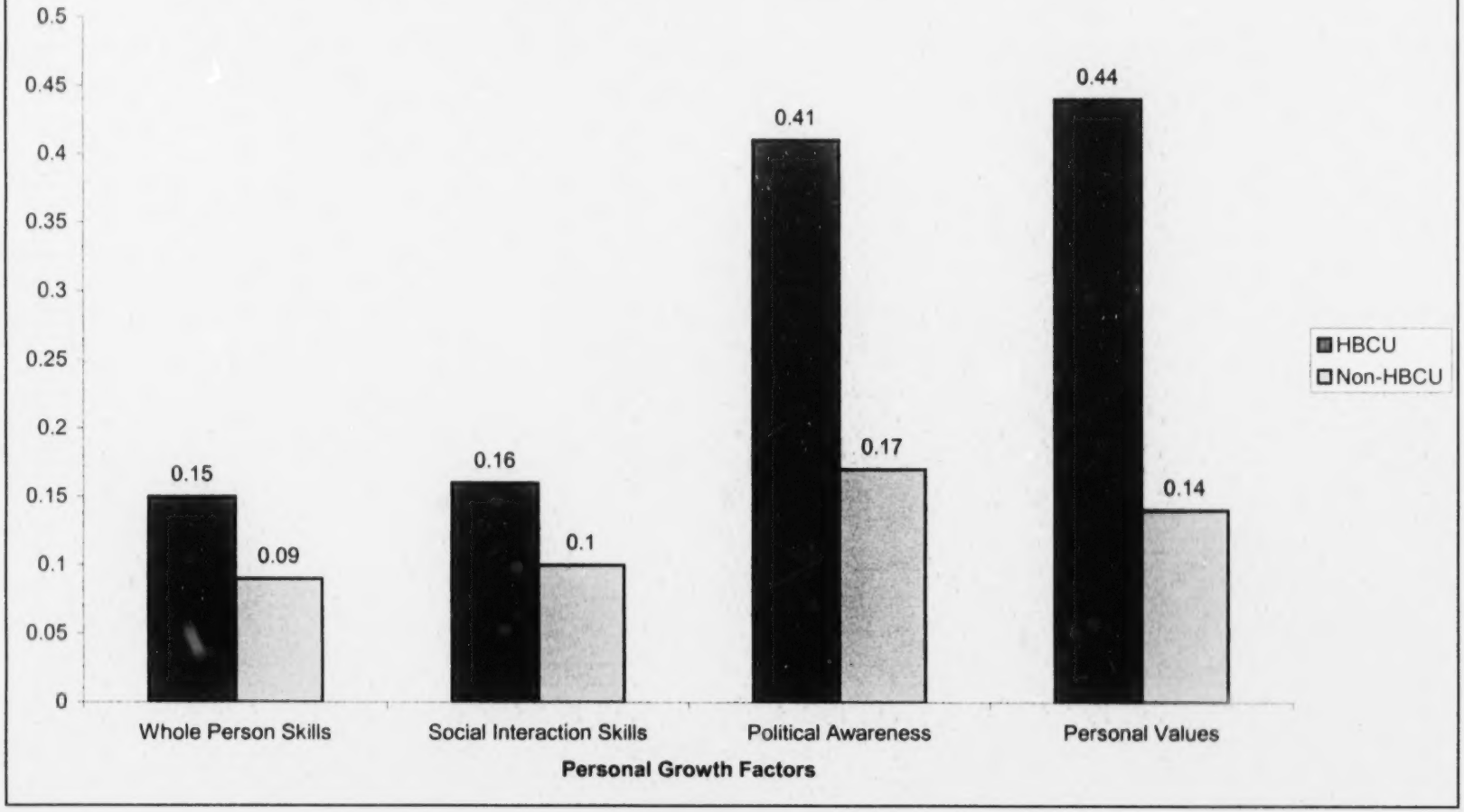


Figure 3
Agreed--General Education Helped Me...
"appreciate great works of literature, philosophy, and art"



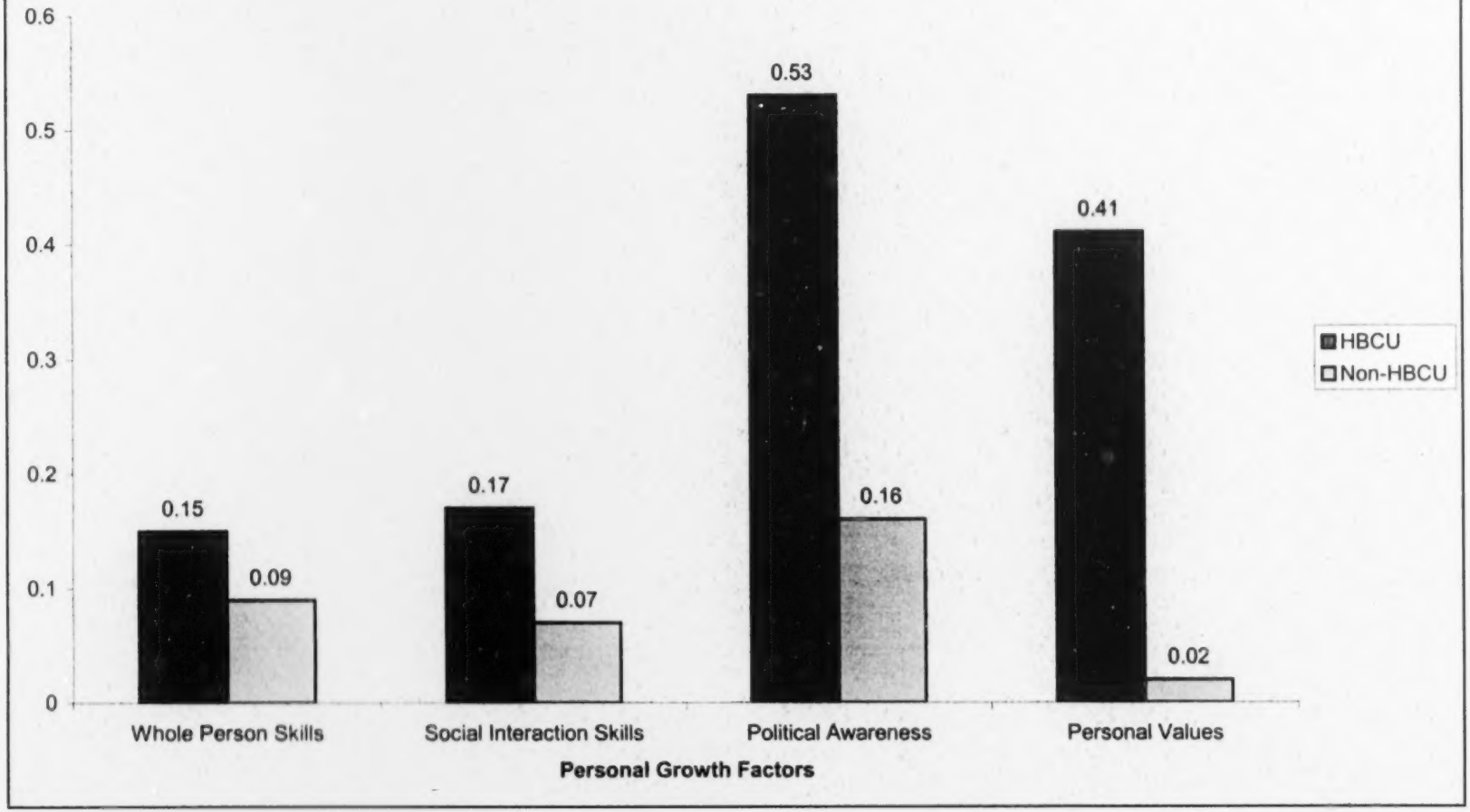
BEST COPY AVAILABLE

Figure 4
Agreed--General Education Helped Me...
"broaden my awareness of diversity among people, their values and cultures"



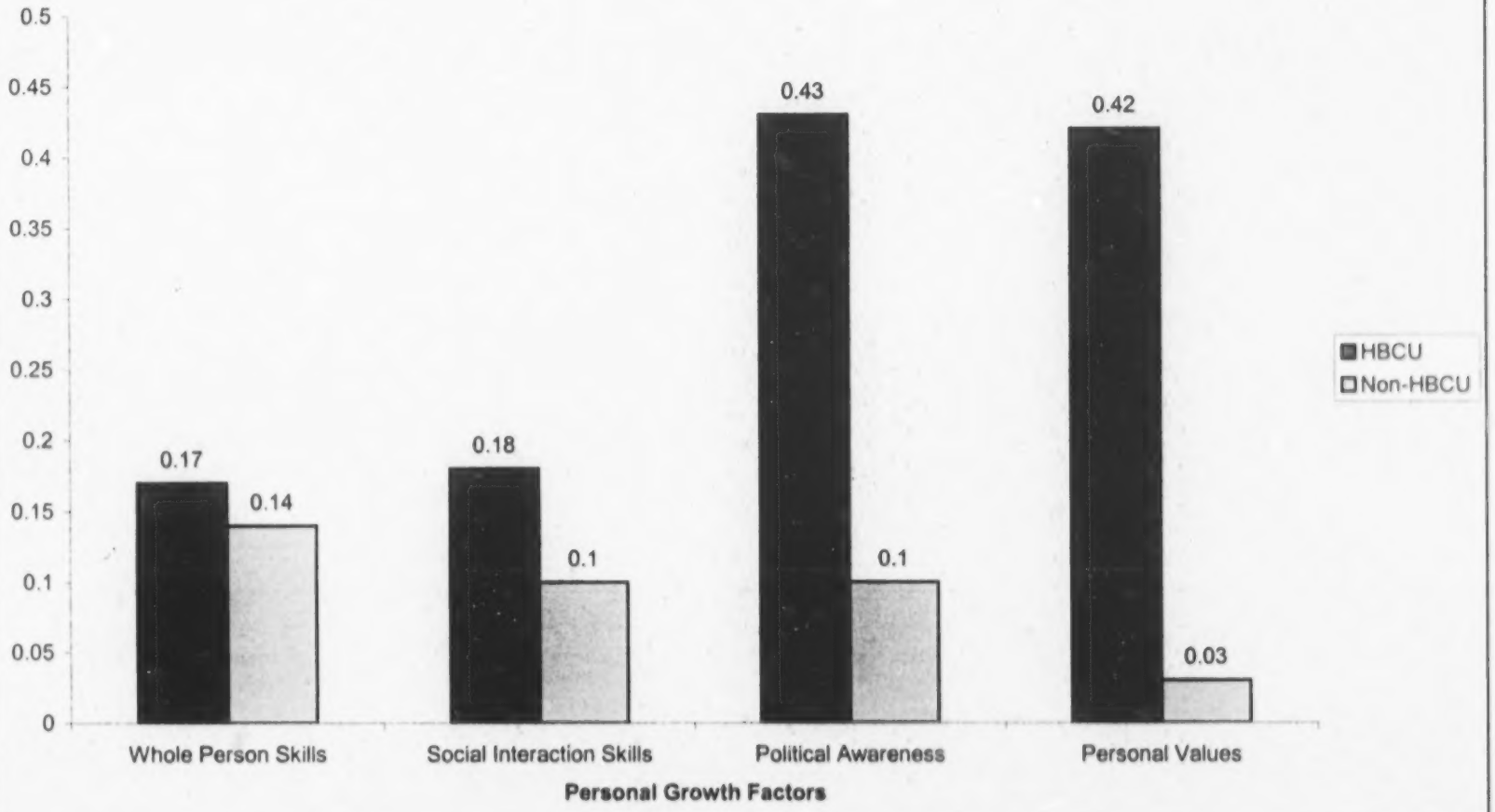
BEST COPY AVAILABLE

Figure 5
Agreed--General Education Helped Me...
"increase my knowledge of the earth and its physical and biological resources"



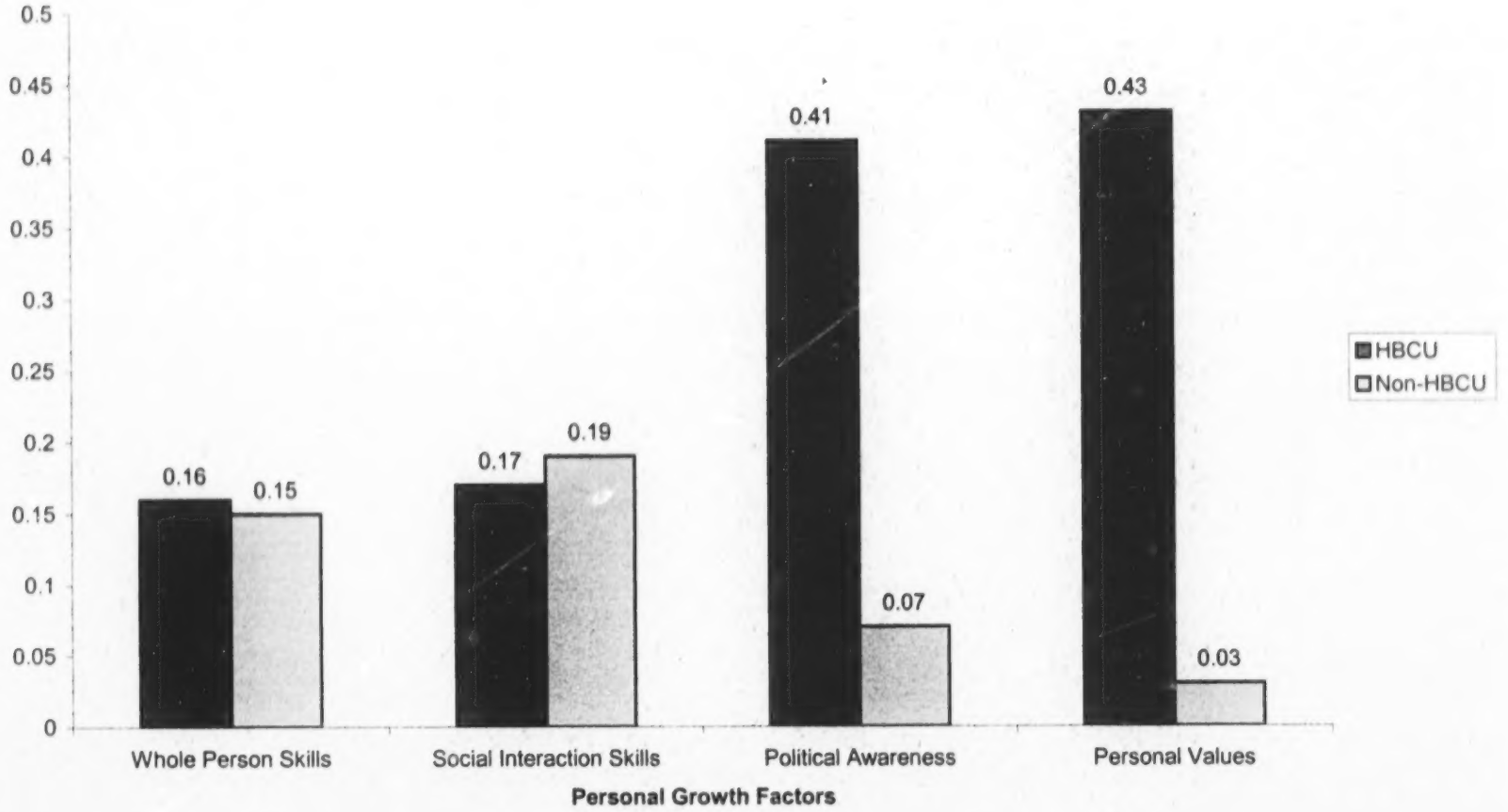
BEST COPY AVAILABLE

Figure 6
Agreed--General Education Helped Me...
"build a framework to organize my learning *within* and *across* areas of study"



BEST COPY AVAILABLE

Figure 7
Agreed--General Education Helped Me...
"become a more independent and self-directed learner"



BEST COPY AVAILABLE